

CLAIMS

What is claimed is:

1. A cleaning method comprising:

a pre-cleaning step of performing at least immersion cleaning for a work using a hydrocarbon-based cleaning liquid containing a surfactant; and a post-cleaning step of performing at least immersion cleaning for the work processed in the pre-cleaning step using a hydrocarbon-based cleaning liquid containing no surfactant;

wherein, in the post-cleaning step, an operation of evacuating the inside of a cleaning bath and an operation of exposing the inside of the cleaning bath to air are repeated while the work is being immersed in the cleaning liquid.

2. The cleaning method according to Claim 1, wherein the work is brought out from the cleaning liquid while being inclined in at least one of the pre-cleaning step and the post-cleaning step.

3. The cleaning method according to Claim 1, wherein the work is brought out from the cleaning liquid while being moved up and down in at least one of the pre-cleaning step and the post-cleaning step.

4. The cleaning method according to Claim 1 , further comprising a step of drying the work between the pre-cleaning step and the post-cleaning step.

5. A method for manufacturing a liquid crystal device comprising a step of cleaning liquid crystal panels enclosing liquid crystal therein as the works by a cleaning method according to Claim 1.

6. The method for manufacturing a liquid crystal device, according to Claim 5, wherein the pre-cleaning step and the post-cleaning step are performed for liquid crystal panels placed adjacent to each other.

7. A cleaning method comprising:
a pre-cleaning step including immersing an object to be cleaned in a hydrocarbon based cleaning liquid containing a surfactant; and
a post-cleaning step including immersing the object to be cleaned from the pre-cleaning step in a cleaning bath containing a hydrocarbon-based cleaning liquid containing no surfactant while repeatedly changing a pressure in the cleaning bath.

8. The cleaning method of Claim 7 wherein said step of changing the pressure in the cleaning bath further comprises reducing the pressure to a reduced state and, thereafter, returning the pressure to an original state.

9. The cleaning method of Claim 8 wherein said reduced state further comprises about 50 to 100 torr.

10. The cleaning method of Claim 8 wherein said original state further comprises about atmospheric pressure.